

## **INP Reference**

### Feasibility study for battery storage system

LOCATION: Ingelheim am Rhein, Germany

**SERVICES:** Solution development / Feasibility studies

INDUSTRY BRANCH/TYPE OF PLANT: Green Energy

CLIENT: Boehringer Ingelheim Pharma GmbH & Co. KG

**ACTIVITY PERIOD: 2025** 

#### **Tasks**

Boehringer Ingelheim Pharma GmbH & Co. KG is planning to install a battery storage system to optimize its own consumption from two open-space PV systems at its site. At the same time, the extent to which the battery storage system can perform additional tasks for emergency power supply and support a black start concept is to be examined.

As part of the commission from INP, a comprehensive feasibility study was carried out. The aim was to investigate the technical and economic feasibility, develop a viable application concept, and derive a rough system dimensioning including an economic analysis.

#### **Project description**

INP took on the development of an application scenario-based evaluation model for a battery storage system. In addition to the rough technical design, a scalable business case was also calculated. Key aspects included the consideration of internal constraints (e.g., minimum return, space and grid connection availability), as well as potential additional benefits such as peak load capping and voltage maintenance. The results served as a basis for decision-making for further steps toward concrete project implementation.

#### **INP Services**

- Analysis and prioritization of core, additional, and opportunity applications
- Assessment of regulatory and technical framework conditions
- Evaluation and rough dimensioning of available battery storage technologies
- Obtaining indicative price quotes
- Development of a simulation model for energy flow balancing and yield calculation
- Conducting economic analyses based on several scenarios
- Estimating investment costs, including connection to the plant network and peripherals
- Evaluating non-monetary benefit factors (safety, continuity of supply)

#### POINTS OF CONTACT



#### **Michael Ohmer**

Leiter Energie- und WärmeVersorgung INP Deutschland GmbH Werkstraße 5 67354 Römerberg Deutschland Tel. +49 6232 6869-0 michael.ohmer@inp-e.com www.inp-e.com



# **INP Reference**

- Creating an implementation schedule
- Moderating project and results workshops